

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A method for encoding a moving video signal comprising a plurality of images, each image having a plurality of pixels, said method comprising steps of:

generating a sum signal and a difference signal of images for every two frames;

deciding an encoding bit rate for the sum signal and the difference signal based on the sum signal and the difference signal;~~and~~

encoding the sum signal and the difference signal respectively based on the encoding bit rate; and

generating an output signal on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the difference signal.
2. (Currently Amended) The method according to claim 1, wherein the step of deciding generates a control signal to be used for the encoding, the control signal representing a proportion of the encoding bit rate for the sum signal and the ~~different~~ difference signal.
3. (Currently Amended) The method according to claim 1, wherein the step of deciding decides the encoding bit rate on the basis of a variation in signal level of each pixel

of the sum signal and a variation in signal level of each pixel of the ~~different~~ difference signal.

4. (Currently Amended) The method according to claim 1, wherein said step of encoding performs the encoding on any one of the sum signal and the ~~different~~ difference signal and then performs the encoding on the other signal.

5. (Currently Amended) The method according to claim 1, wherein the step of deciding uses a signal level variation to judge whether the signal contains more information. ~~decides the encoding bit rate on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the different signal.~~

6. (Currently Amended) The method according to claim 1, further comprising a step of adjusting a level of any one of the sum signal and the ~~different~~ difference signal.

7. (Currently Amended) An apparatus for encoding a moving video signal comprising a plurality of images, each image having a plurality of pixels, said apparatus comprising:

a first generating element for generating a sum signal and a difference signal of images for every two frames;

a deciding element for deciding an encoding bit rate for the sum signal and the difference signal based on the sum signal and the difference signal; ~~and~~

an encoding element for encoding the sum signal and the difference signal
respectively based on the encoding bit rate; and
a second generating element for generating an output signal on the basis of a
proportion of a data quantity generated by encoding the sum signal and a data quantity generated
by encoding the difference signal.

8. (Currently Amended) The apparatus according to claim 7, wherein the
deciding element generates a control signal to be used for the encoding element, the control
signal representing a proportion of the encoding bit rate for the sum signal and the ~~different~~
difference signal.

9. (Currently Amended) The apparatus according to claim 7, wherein the
deciding element decides the encoding bit rate on the basis of a variation in signal level of each
pixel of the sum signal and a variation in signal level of each pixel of the ~~different~~ difference
signal.

10. (Currently Amended) The apparatus according to claim 7, wherein said
encoding element performs the encoding on any one of the sum signal and the ~~different~~
difference signal and then performs the encoding on the other signal.

11. (Currently Amended) The apparatus according to claim 7, wherein the
deciding element uses a signal level variation to judge whether the signal contains more
information. ~~decides the encoding bit rate on the basis of a proportion of a data quantity~~

~~generated by encoding the sum signal and a data quantity generated by encoding the different signal.~~

12. (Currently Amended) The apparatus according to claim 7, further comprising an adjustment element for adjusting a level of any one of the sum signal and the ~~different~~ difference signal.

13. (Currently Amended) A computer program operatable by a computer, the program comprising instruction data to be carried out by the computer, the instruction data comprising:

data to instruct generating a sum signal and a difference signal of images for every two frames;

data to instruct deciding an encoding bit rate for the sum signal and the difference signal based on the sum signal and the difference signal; ~~and~~

data to instruct encoding the sum signal and the difference signal respectively based on the encoding bit rate; and

data to instruct generating an output signal on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the difference signal.

14. (Currently Amended) The program according to claim 13, wherein the data to instruct deciding includes generating a control signal to be used for the encoding, the control signal representing a proportion of the encoding bit rate for the sum signal and the

~~different~~ difference signal.

15. (Currently Amended) The program according to claim 13, wherein the data to instruct deciding includes deciding the encoding bit rate on the basis of a variation in signal level of each pixel of the sum signal and a variation in signal level of each pixel of the ~~different~~ difference signal.

16. (Currently Amended) The program according to claim 13, wherein said data to instruct the encoding instructs encoding any one of the sum signal and the ~~different~~ difference signal and then instructs encoding the other signal.

17. (Currently Amended) The program according to claim 13, wherein the data to instruct deciding includes using a signal level variation to judge whether the signal contains more information. ~~deciding the encoding bit rate on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the~~ ~~different~~ signal.

18. (Currently Amended) The program according to claim 13 further comprising data to adjust a level of any one of the sum signal and the ~~different~~ difference signal.

19. (Currently Amended) A method for decoding encoded data by encoding a moving video signal comprising a plurality of images, each image having a plurality of pixels, the encoded data comprising an encoded sum signal generated by encoding a sum signal of

images and an encoded ~~different~~difference signal generated by encoding a ~~different~~difference signal of images, the sum signal and the difference signal of images being generated for every two frames, the method comprising steps of:

decoding the encoded data to generate a decoded sum signal and a decoded ~~different~~difference signal;

generating two-frame images using the decoded sum signal and the decoded ~~different~~difference signal; and

generating an output signal on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the difference signal; and

outputting the two-frame images in a prescribed order to generate a decoded moving video signal.

20. (Currently Amended) An apparatus for decoding encoded data by encoding a moving video signal comprising a plurality of images, each image having a plurality of pixels, the encoded data comprising an encoded sum signal generated by encoding a sum signal of images and an encoded ~~different~~difference signal generated by encoding a ~~different~~difference signal of images, the sum signal and difference signal of images being generated for every two frames, the apparatus comprising:

an element for decoding the encoded data to generate a decoded sum signal and a decoded ~~different~~difference signal;

an element for generating two-frame images using the decoded sum signal and the decoded ~~different~~difference signal;

an element for generating an output signal on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the difference signal; and

an element for outputting the two-frame images in a prescribed order to generate a decoded moving video signal.

21. (Currently Amended) A computer program operatable by a computer, the program comprising instruction data to be carried out by the computer, the instruction data including decoding encoded data by encoding a moving video signal comprising a plurality of images, each image having a plurality of pixels, the encoded data comprising an encoded sum signal generated by encoding a sum signal of images and an encoded ~~different~~ difference data generated by encoding a ~~different~~ difference signal of images, the sum signal and difference signal of images being generated for every two frames, the instruction data further comprising:

data to instruct decoding the encoded data to generate a decoded sum signal and a decoded ~~different~~ difference signal;

data to instruct generating two-frame images using the decoded sum signal and the decoded ~~different~~ difference signal;

data to instruct generating an output signal on the basis of a proportion of a data quantity generated by encoding the sum signal and a data quantity generated by encoding the difference signal; and

data to instruct outputting the two-frame images in a prescribed order to generate a decoded moving video signal.